



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,627	09/29/2003	Prajakta S. Joshi	350078.409	4709
34554	7590	06/05/2006	EXAMINER	
SEED INTELLECTUAL PROPERTY LAW GROUP PLLC			VO, TED T	
701 FIFTH AVENUE, SUITE 6300			ART UNIT	
SEATTLE, WA 98104-7092			PAPER NUMBER	
			2191	

DATE MAILED: 06/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/674,627	<b>Applicant(s)</b> JOSHI, PRAJAKTA S.	
	<b>Examiner</b> Ted T. Vo	<b>Art Unit</b> 2191	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 9/29/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4/9/04, 3/21/05, 9/23/05, 2/21/06, 5/02/06</u> | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. This action is in response to the communication filed on 09/29/2003.

Claims 1-28 are pending in the application.

***Specification***

2. This specification is object to because it has URLs or browser executable code. For example, see p. 1: 15. Others are identified as [www.gslb1.com](http://www.gslb1.com), or [www.foo.com](http://www.foo.com). Applicant is required to alter or delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 14-16: Claims 14-16, led by claim 14, recite assigning first address and second address.

These addresses are assigned but used nowhere. The end limitation in claim 14, "*using the mapping information at the load balancing device to rank servers associated with the first network site based on at least one metric usable with virtual addresses*" does nothing with "assigning first address and second address". Claiming a claim subject matter that does nothing will cause the

Art Unit: 2191

claim ambiguous. It is indefinite because it does not know what to do within first address and second address.

For examining purpose, the claimed subject matter, assigning first address and second address is redundant and thus no weight.

Claims 1-8: Claims 1-8 recite "*a network resource*" in claims 1, 8, "*a network device*" in claims 6, 7, and 8. The terms "network resource" and "network device" are not clearly defined and/or described in the specification. Accordingly, it does not know what elements in the specification are "network resource and/or "network device".

The claimed recitation should be preceded in the specification. These claim subject matters render the claims indefinite because of failing to particularly point out and distinctly claim the subject matters.

For examining purpose, the claimed subject matters, "network resource" and "network device" are interpreted as "things associated with network".

Claims 9-13: recite "*a network resource*" in claim 9, "*a network device*" in claim 9. Accordingly, these terms render the claims 9-13 indefinites as they are mentioned above.

Claims 18-19: recite "*a same network device*" in claim 18, "*a network resource*" in claim 19. Accordingly, these terms render the claims 18-19 indefinites as they are mentioned above.

Claim 20: recites "*a first network device*" and "*a second network device*". Accordingly, these terms render the claim 20 indefinites as they are mentioned above.

Claims 21-23: recite "*a network resource*" in claim 21. Accordingly, this term renders the claims 21-23 indefinites as it is mentioned above.

Claims 24-28: recite "*a network resource*" in claim 24, "*a network device*" in claim 24.

Accordingly, these terms render the claims 24-28 indefinites as they are mentioned above.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-28 are rejected under 35 U.S.C. 102(b) as being anticipated by White Paper from Foundry Networks, "Server Load Balancing in Today's Web-enabled Enterprises" (Hereinafter: White Paper), 4-2002.

Given the broadest reasonable interpretation of followed claims in light of the specification.

As per Claim 1: White paper discloses, *A method, comprising:*

*obtaining information related to a mapping between first* (See Figure in p. 6: e.g. an address sent by a client that is not found in a local DNS) *and second addresses* (See Figure in p. 6: e.g. another address assigned for load balancing) *associated with a network resource*

(See p. 6, item 3, CGS sends "this packet" to the authoritative DNS server, i.e. the authoritative DNS server obtains information);

*and sending the mapping information to a load balancing device to allow the load balancing device to load balance traffic to the network resource using at least one metric associated with the second address and the mapping information* (See p. 6, items 3-7, i.e. the authoritative DNS server processes process "this request" and sends IP address information. The CGS intercepts "this packet" and selects the best IP address to send to the Client in SF. The load balancing is performed by allow the client switch to the best IP address).

As per Claim 2: White paper discloses, *The method of claim 1 wherein sending the mapping information to the load balancing device includes sending the second address instead of the first*

Art Unit: 2191

*address to the load balancing device to allow the load balancing device to identify the second address as a virtual private address on a network device through which the network resource can be accessed. See p. 7, discussing Controller GSLB Switch that receives IP Addresses for resolving load balancing. It appears that the list of IP addresses would not include the address in the local DNS.*

As per Claim 3: White paper discloses, *The method of claim 1 wherein the first and second addresses are IP addresses. See the Figure in P. 6*

As per Claim 4: White paper discloses, *The method of claim 1 wherein the first address is a private IP address and the second address is a public IP address. It appears addresses used the Figure of P. 6 are related to private and public IP addresses in accordance to the discussion in p.2 section Scalability and Management.*

As per Claim 5: White paper discloses, *The method of claim 1 wherein determining the mapping information between the first and second addresses comprises determining the mapping from user configuration input. See p. 6, seven bullet.*

As per Claim 6: White paper discloses, *The method of claim 1 wherein determining the mapping information between the first and second addresses comprises:*

*establishing a message communication between a network device through which the network resource can be accessed (See communication lines in the Figure in p. 6) and a mapping device that maps the first address to the second address (switch within San Francisco, or Hong Kong); and*

*receiving the mapping information from the mapping device via the message communication (A boundary that is pointed as seen in the Figure. For example, "response").*

As per Claim 7: White paper discloses,

*The method of claim 1, further comprising:*

*receiving the mapping information by a first component of a network device through which the network resource is accessed (a boundary that is pointed as seen in the Figure. For example, the arrow from Authoritative DNS to CGS, where in the reference, the Authoritative DNS sends IP address information); and*

Art Unit: 2191

*load balancing traffic to the network resource by a second component of the network device based on the received mapping information (Referred to CGS; in this description, it provides a client with "first address" (items 6-7)).*

Note: As addressed, *first "network resource "* and *network device* are not defined in the specification. It makes the claim indefinite because it does not know precisely these elements.

As per Claim 8: White paper discloses, *The method of claim 1, further comprising:*

*receiving a first mapping information for a first network resource associated with a network device through which the first network resource can be accessed (See the Figure in p. 6, item 4, intercepts this packet) ;*

*receiving a second mapping information for a second network resource associated with the network device at a remote load balancing device (See the Figure in p. 6, item 4, the best IP address send to client in SF);*

*load balancing traffic to the first network resource with the network device based on the first mapping information; and load balancing traffic to the second network resource by with remote load balancing device based on the second mapping information (See the Figure in p. 6, the load balancing is performed)*

Note: As addressed, *a network device* and *a network resource* are not defined in the specification. It makes the claim indefinite because it does not know precisely these elements.

As per Claim 9: White paper discloses, A method, comprising:

*determining a mapping between a private address on a network device and a public address, both addresses being associated with a network resource accessible via the network device (See Figure in p. 6, item 4, the CGS select the best IP address);*

*if the mapping between the private address and the public address is determined to be present, sending the public address instead of the private address from the network device to a load balancing device that can load balance traffic to the network resource*

*(See Figure in p. 6, item 4, the CGS intercepts "this packet; select the best IP address; send the best IP address for resolving load balancing);*

Art Unit: 2191

*and updating an address record to allow the load balancing device to interpret the received public address as corresponding to a virtual address on the network device and to use the received public address in connection with a load balancing metric that is based on virtual address (See Scalability and Management, referred: adding server farm. See p. 9, Maximum Scalability, referred: "enable IT managers to create a server farm, represented by a single IP address known as a virtual IP address").*

As per Claim 10: See IP address not found in SF and the best IP address resolved by load balancing.

As per Claim 11: The local DNS receive response from CGS, and see item 4 in p. 6, where in p. 7, White paper discloses that CGS selects the best IP address based on several GSLB Metrics").

As per Claim 12: See Figure in p. 6, the best IP address is select and sent.

As per Claim 13: See Figure in p. 6, the best IP address is used in load balancing.

As per Claim 14: White paper discloses,

*assigning a first address and a second address to at least one server associated with a first network site (p. 6: item 4, Authoritative DNS provides a IP address information and send to Controller GSLB Switch);*

*determining mapping information between the first and second addresses at a network device associated with the first network site (p. 6: item 4, Controller GSLB Switch receives IP address information sent from Authoritative DNS);*

*sending the mapping information for the host servers (e.g. London, San Francisco, Hong Kong) associated with the first network site (e.g. www. Foundrynetworks.com) from the first network device to the load balancing device (Authoritative DNS and Controller GSLB Switch); and*

*using the mapping information at the load balancing device to rank servers associated with the first network site based on at least one metric usable with virtual address (p. 6: item 4, select the best IP address; see p. 7, first paragraph).*

As per Claim 15: With regards to the limitations recited in Claim 15: see In p. 6, see the Figure, referred: response to San Francisco, and items 6-7.



Art Unit: 2191

As per Claim 16: With regards to the limitations recited in Claim 16 : see in p. 2, see Scalability and Management, referred: adding server farm.

As per Claim 17: White paper discloses,

*a first component to determine presence of a mapping between a private address and public address (See p. 4, within SLB During Server Failure: "demarcating public and private networks";*

*In the reference, the Authoritative DNS can determine presence of a mapping between a private address and public address when it sends back IP address information);*

*a second component to receive the public address instead of the private address from the first component if mapping is present to determine presence of a mapping between a private address and public address (referred to CGS; in this description, it provides a client with "first address" (items 6-7));*

*an address record that can be updated to indicate that the public address corresponds to a virtual address (See Scalability and Management, referred: adding server farm. See p. 9, Maximum Scalability, referred: "enable IT managers to create a server farm, represented by a single IP address known as a virtual IP address");*

*a third component to load balance traffic to the public address based on a metric related to virtual addresses (the local DNS receive response from CGS, and see item 4 in p. 6).*

As pre claim 18: With regards to the limitations recited in Claim 18: See the Figure in p. 6

As pre claim 19: With regards to the limitations recited in Claim 19: See the Figure in p. 6, and see item 7.

As pre claim 20: With regards to the limitations recited in Claim 20: See the Figure in p. 6.

As pre claim 21: With regards to the limitations recited in Claim 21: See rationale address in Claim 14.

As pre claim 22: With regards to the limitations recited in Claim 22: See the Figure in p. 6 and see all items 1-7.

As pre claim 23: With regards to the limitations recited in Claim 23: See the Figure in p. 6 and see all items 1-7; and see the statement in p. 7: "CGS selects the best IP address based on several GSLB Metrics".

Art Unit: 2191

As pre claim 24: With regards to the limitations recited in Claim 24: See rationale addressed in Claim 9 above.

As pre claim 25: With regards to the limitations recited in Claim 25: The claim is depending on Claim 24, where the scope of the claim is an article comprising a machine-readable medium having instructions: Therefore, claim 25's functionality is including instructions stored thereon to send a private address instead... See rationale Figure in p. 6, "DNS request".

As pre claim 26: With regards to the limitations recited in Claim 26: See the Figure in p. 6, "select best IP address".

As pre claim 27: With regards to the limitations recited in Claim 27: See the Figure in p. 6, "select best IP address" and item 7.

As pre claim 28: With regards to the limitations recited in Claim 28: See p. 9, Maximum Scalability, and referred: "enable IT managers to create a server farm, represented by a single IP address known as a virtual IP address".

### ***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ted T. Vo whose telephone number is (571) 272-3706. The examiner can normally be reached on 8:00AM to 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wei Y. Zhen can be reached on (571) 272-3708.

The facsimile number for the organization where this application or proceeding is assigned is the Central Facsimile number **571-273-8300**.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public

Art Unit: 2191

PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Ted Vo", with a stylized flourish at the end.

Ted T. Vo  
Primary Examiner  
Art Unit 2191  
May 25, 2006